

Draft Revision

April 10, 2023

Chapter 315 Subsurface Sewage Disposal Regulations

[HISTORY: Adopted by the Board of Health of the Town of Groton 11-26-2001; amended in its entirety 8-20-2007. Subsequent amendments noted where applicable.]

§ 315-1 Testing requirements.

- A. The Board of Health shall require that each individual lot shall meet all applicable requirements of Title V and the ~~Groton~~ Board of Health. Two groundwater observation holes and two percolation tests must be performed on each lot to prove a suitable primary and expansion area for each lot. This requirement shall also apply to a subdivision for which a preliminary or definitive plan has been submitted.
- B. Deep observation holes for the determination of groundwater elevations may be performed during the months of March and April. Use of holes conducted in months other than March and April will be limited to Class II and Class III soils, with a percolation rate of greater than five minutes/inch. Observation holes in March and April may be required by the Board of Health or its agent at their discretion on all sites. Out of season soil testing for upgrades are allowed without a variance.
- C. Deep observation holes must be completely refilled within 12 hours of being witnessed by the Board of Health or its agent.
- D. A lot must be inspected by the Board of Health or its agent when it is clear of snow before a sewage disposal works construction permit may be issued.
- E. There must be a minimum of five feet of pervious material between the bottom of the leaching facility and the groundwater elevation and/or any impervious layer. The offset above groundwater may be increased depending upon climatic and/or site conditions encountered.
- F. Well water samples taken as required by 310 CMR 15.303(1)(m) shall be taken by the ~~Groton~~ Board of Health, the Nashoba Associated Boards of Health, or a representative from a state-certified water analysis laboratory.

§ 315-2 Existing structures; conversions; additions.

- A. No installation for summer use shall be considered on any reduced basis. All sewage disposal systems shall be designed for a full twelve-month year-round usage.
- B. No existing homes shall be subdivided into multiple apartments without prior approval of the Board of Health.
- C. No additions or alterations to a dwelling and/or structures will be allowed until it is documented to the satisfaction of the Board of Health or its agent that the existing sewage disposal system is adequate in terms of permeability of soils, groundwater, and refusal for a proposed alteration or addition to an existing dwelling and/or structure, and that the lot size is large enough to permit a septic system repair or expansion.

D. Conversion of seasonal residences.

- (1) Conversion of a lawfully seasonal residence for use as a permitted year-round residence and for which the lot is not conforming to the lot size standards of the bylaw in effect is subject to the grant of a special permit by the Board of Appeals. Any application for such a permit shall be referred to the Board of Health for a report thereon within 35 days after receipt of the application by the Board of Health.
- (2) A special permit shall be granted only if the Board of Appeals is assured by the Board of Health that:
 - (a) The minimum Standards for Fitness for Human Habitation (Article II of the State Sanitary Code) and Minimum Requirements for the Disposal of Sanitary Sewage in Unsewered Areas (Title 5 of the State Environmental Code) and the rules and regulations of the Board of Health are met or the Board of Appeals conditions the special permit on meeting such minimum standards; and
 - (b) Such conversion of all seasonal residences in the general area having lots similar (or less limited) in lot size and land and soil type characteristics would not result in substantial danger of contamination of the groundwater supply or of any pond or stream. In making such finding, the Board of Health shall consider the ability of the soil to absorb expected quantities of sewage disposal effluent, the degree of filtration of effluent before entering bedrock fissures or other groundwater supply and other characteristics of the land soil types.

§ 315-3 **Design requirements.**

- A. All plans, including as-built plans, for subsurface sewage disposal systems submitted to the Board of Health or its agent must be drawn to a scale of one inch to 20 feet. Design plans shall include a locus plan, an original stamp, signature and date by the engineer or sanitarian of record, and a system profile drawn to a scale of one inch equals 20 feet horizontal and one inch equals eight feet vertical. As-built submissions shall include at least one copy showing as-built conditions overlaying the design plan. As-built plans shall include all invert and septic system component elevations, including pump float elevations, if applicable.
- B. When engineered plans are required, the plans must be submitted by a registered sanitary engineer; a registered professional engineer with experience in sanitary engineering or a registered sanitarian ~~with a co-stamp indicating review of the plan by an engineer meeting the referenced experience.~~
- C. When submitting engineered plans to the Board of Health or its agent for review, if the design firm has not been responsible for the lot line survey for said lot, it shall be the responsibility of the applicant to supply to the Board or its agent an official, stamped copy of the survey plan for the referenced lot.
- D. The sewage disposal system must be located on the same lot as the facility it is intended to serve; for the purpose of this regulation, a lot shall not be interconnected by an easement or right-of-way. Fill easements are not allowed to meet break-out requirements with new construction.
- E. The area between trenches shall not be used for future expansion of a system.
- F. Leaching trenches installed in fill material will require the use of forms or a trench box when the invert of the pipe of the proposed trench is above original grade. When the invert elevation of the proposed trenches is below the original elevation of top and subsoil in the proposed leach area, then trenches may be constructed without the use of a box or forms, provided fill has been properly placed and compacted prior to trench construction.
- G. The proposed expansion area must be accessible by gravity flow or in the same manner that the primary area is designed and/or installed.
- H. At least five feet of naturally occurring materials must be in place over ledge; fill shall not be used to meet this requirement.

- I. Percolation rates over 14 minutes/inch require leaching trenches.
- J. Pump systems.
 - (1) All force main sewer lines used for effluent pump and grinder pump systems shall be 160 pounds flex or equal. The force main, once installed, must be pressure tested at least 15 p.s.i. for 15 minutes prior to backfill. The force main must be bedded in a minimum of six inches of sand.
 - (2) Rail systems, or approved equal, shall be provided for all pump systems to allow for removal of the pump for maintenance, repair or replacement.
 - (3) Rail systems for pumps up to one horsepower shall consist of 3/4-inch PVC pipe with steel rebar within for support, or approved equal. The ends of the pipe are to be sealed to prevent effluent infiltration.
 - (4) Rail systems for pumps greater than one horsepower shall consist of two-inch stainless-steel pipe.
 - (5) Wiring shall be continuous to the building without the use of a junction box in the pump chamber. This includes wiring for the pump and the floats. Any conduit around electric lines shall be caulk-sealed to prevent liquid or gas entry at both ends of the conduit.
 - (6) For effluent pump systems, there shall be a drain hole to allow effluent to drain back from the force main. The drain hole shall be installed after the check valve.
 - (7) The maintenance of all pump systems, solid or effluent shall be documented by the design engineer. A copy of the system maintenance plan shall be provided to the homeowner by the installer and/or builder prior to occupancy.
- K. Whenever a system must be pumped, the soil absorption system shall be pressure dosed. For all system designs greater than 2,000 gallons per day, the system shall be inspected per Title 5, 310 CMR 15.254(2)(d), not less than four times per year.
- L. No component of a sewage disposal system, including but not limited to the leach area, sewer line, distribution box, distribution line, septic tank, clean-out or manhole, shall be located under any portion of a public or private road right-of-way.
- M. Zone III nitrogen loading.
 - (1) Any sewage disposal system serving any facility, other than a residential facility serving two or fewer units, located within a Zone III Water Resource Protection Area as mapped by the Massachusetts Department of Environmental Protection (DEP) or as designated by the Town of Groton, shall not receive more than 220 gallons per day of sewage effluent per 10,000 square feet of property area. *See the Town of Groton Water Resource Protection Districts Map, adopted March 10, 2003, as amended.*
 - (2) When innovative and alternative treatment is provided, which is approved by the DEP for the removal of nitrogen, a facility may discharge up to a total of 275 gallons per day per 10,000 square feet of property area.
 - (3) For the purpose of this regulation, only property which is contiguous and the legal title is held and controlled by the same owner may be used when calculating nitrogen loading.

§ 315-4 **Interceptor drains.**

- A. Interceptor drains for the purpose of this regulation shall be defined as any drain installed to lower the groundwater table in any proposed leach areas.
- B. Interceptor drains shall be installed and subsequently tested in an approved groundwater season as designated by the Board of Health.

- C. Testing of an interceptor drain will require the excavation and observation by the Board or its agent of at least three test holes. These test holes shall be one uphill of the installed drain, one in the proposed primary area, and one in the proposed expansion area.
- D. The observed test holes must provide definitive evidence of the drain's effectiveness in lowering the water table.

§ 315-5 Distance requirements.

- A. Leaching facilities (including the proposed expansion area) must be located at least 100 feet from any wetland, watercourse, wetland vegetation, seasonal streams and drainage ditches.
- B. When the length of pipe from the house prior to the distribution box exceeds 100 feet, construction shall comply with 310 CMR 15.222.
- C. A minimum of 10 feet must be available between the primary and expansion leaching facilities.
- D. A minimum of 25 feet must be available between a failing percolation test and the entire exterior perimeter of any proposed leach areas.
- E. A minimum of 25 feet (horizontal distance) must be available between ledge and the entire exterior perimeter of any proposed leach areas. For the purpose of definition, ledge observed at a depth not in compliance with Title 5 shall be used to determine the measurement distance.
- F. A minimum of ~~35~~ 20 feet must be available between the edge of any street right-of-way, passageway or road line and the entire exterior perimeter of any proposed leach areas.
- G. A minimum of 20 feet must be available between any property line and the entire exterior perimeter of any proposed leach areas.
- H. The distances required by Title 5 and the ~~Groton~~ Board of Health are minimum distances and may be increased if, in the opinion of the Board or its agent, such an increase is required to protect the environment or the public health.
- I. A minimum of 15 feet must be available between the edge of a soil absorption system and an adjacent side slope, measured from the top of the pea stone elevation in the soil absorption system. The finished side slope is not to be steeper than 3:1 (horizontal-vertical). Walls and impervious barriers are not allowed to adjust the side slope requirement and offset.

§ 315-6 Square footage requirements.

Leach beds and pits will be sized at 150% of Title 5 requirements. Leaching areas based on percolation rates greater than 14 minutes/inch shall have a reserve area of 150% of the primary area. Notice must be recorded at the Registry of Deeds before the permit is released.

§ 315-7 Tight tanks; privies.

- A. Holding or tight tanks shall not be used for sewage disposal in new or remodeled buildings. All holding tanks and tight tanks shall have valid contracts for pumping and visual observation for the tanks at all times, for the duration of the use of the tanks. The property owner shall submit copies of the pumping records to the Board of Health. The property owner provide evidence to the Board of Health that an escrow account in the amount of \$1500 has been established to ensure that the tight tank is pumped whenever necessary.
- B. Privies, humus and self-contained toilets.
 - (1) No privy, humus or self-contained toilet may be used without the written permission of the Board of Health. Such permission shall indicate the period of time for which such a facility may be used and in no case shall exceed one year.

- (2) Permanently installed privies, humus or self-contained toilets must receive written permission annually from the Board of Health.

§ 315-8 **Review of plan.**

- A. The ~~Groton~~ Board of Health may require review of a subsurface sewage system plan with a discharge of 5,000 gallons or more.
- B. The Board of Health shall select the engineer for this review, and the cost of the engineer shall be borne by the applicant for this system.
- C. The engineer shall be a registered professional engineer in the Commonwealth of Massachusetts with a specialty in sanitary or civil engineering.
- D. This regulation shall apply to all sewage systems of this capacity that discharge effluent in the Town of Groton, effective ~~August 20, 2007~~ May X, 2023.

§ 315-9 **Variance procedure.**

- A. Any request for a variance from these supplemental regulations shall be submitted in writing to the Board of Health and its agent. The design plans must accompany the variance request. The request for the variance shall come from the applicant and/or the applicant's engineer and shall explain the reason(s) why said variance(s) are requested.
- B. All requests for variances must include a listing of all variances sought.
- C. ~~All abutters, including owners on the opposite side of the street, and their abutters must be notified by the applicant of any variance request by a copy of a variance request letter sent to their usual place of address, by certified mail, return receipt requested, at least 10 days prior to the hearing date. Return receipts are to be provided to the Board of Health at the hearing. The applicant shall present a certificate of mailing receipt for all Abutters at the beginning of the public hearing. The presentation of the receipt for all abutters required to be notified as identified on the tax list shall constitute compliance with Abutter notification requirements. The Board of Health shall determine whether the applicant has complied with the abutter notification requirements.~~
- D. Any request for a local upgrade approval as provided in Title 5 shall require submissions as noted in Subsections A, B and C above.

§ 315-10 **Revocation.**

The Board of Health reserves the right to revoke any approval, permit or certificate of compliance which is found to be based on incorrect, incomplete, or misleading information.

§ 315-11 **Repeal and date of effect.**

All rules and regulations pertaining to subsurface sewage disposal systems and any part thereof in conflict with these regulations are hereby repealed, and these regulations shall be in full force and effect ~~August 20, 2007~~ May X 2023.

§ 315-12 **Severability.**

Should any paragraph, sentence, clause, or phrase of these regulations be declared unconstitutional or invalid for any reason by any court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision, and such holding shall not affect the validity of the remaining portions thereof.

§ 315-13 **Appeals.**

Any person aggrieved by the final decision of the Board may seek relief therefrom pursuant to MGL C. 249, § 4, as otherwise provided by the laws of this commonwealth.

